

# DRAFT

## NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

### FACT SHEET (Pursuant to NAC 445A.236) March 2004

**PERMITTEE NAME:** Kerr-McGee Chemical LLC

**MAILING ADDRESS:** Post Office Box 55  
Henderson, Nevada 89009

**PERMIT NUMBER:** NV0023060 – Renewal

**DISCHARGE LOCATION:** Kerr-McGee Chemical LLC, Henderson Facility  
8000 West Lake Mead Drive  
Henderson, Clark County, Nevada 89015

Location of Fluidized-Bed Reactor :

Latitude: 36° 02' 35.4" North  
Longitude: 114° 59' 58.7" West

Township 22 South, Range 62 East, Section 12 MDB&M

**FLOW:** Outfall 001: Treated Water Discharge to the Las Vegas Wash upstream of  
Telephone Line Road

Latitude: 36° 05' 15" North<sup>1</sup>  
Longitude: 114° 59' 30" West

Flow Rate: 1.45 Million Gallons per Day as a 30-day average  
1.75 Million Gallons per Day as a daily maximum

#### **GENERAL:**

Kerr-McGee Chemical LLC (KM) submitted an application for the renewal of National Discharge Elimination System (NPDES) Permit NV0023060 on February 3, 2005. KM requests that the following modifications be incorporated into the renewal of the permit: (a) the reduction or elimination in monitoring frequency for specific chemical constituents **(see Tables I.1.A., I.1.B. and I.2 below for proposed monitoring frequency changes)**. In accordance with EPA's Guidance (Table 1 below), the Division agrees that the proposed modifications in monitoring frequencies are justified; and (b) the treatment of other sources of perchlorate contaminated water.

- (a) The U.S. Environmental Protection Agency (EPA) has established guidance criteria for reduction of NPDES permit monitoring frequencies (*Interim Guidance for Performance-Based Reduction of NPDES Permit Monitoring Frequencies, April 1996*). This document describes five (5) criteria to consider when determining if a particular facility is eligible for reductions, and if so, the amount of the reductions. The criteria are as follows:

- i. Facility Enforcement History

Facilities which have been criminally convicted under any Federal or State environmental statute of falsifying monitoring data or committing violations which presented an imminent and substantial endangerment to public health or welfare will not receive any reductions

<sup>1</sup> Coordinates corrected on August 17, 2004 to reflect the accurate location of the Outfall 001 discharge into the Las Vegas Wash. Original coordinates cited reference a location approximately 1,000 to 1,600 feet upstream of the actual discharge into the Las Vegas Wash. The error is most likely due to the use of previously-available instrumentation less sophisticated than current technology. Applicable water quality criteria for the affected reach of the Las Vegas Wash remain unchanged by the corrected discharge location.

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at any time in the future.

*KM has not been convicted of the above acts and is therefore eligible for consideration of reductions.*

ii. Parameter-by Parameter Compliance History

A facility may not have had any Significant Noncompliance (SNC) violations for the parameters for which monitoring/reporting reductions are being considered during the last two years and, a facility may not have had any effluent violations of selected (critical) parameters during the last year. The "selected parameters" can be permit-specific and would be determined at the discretion of the permitting authority. These parameters could include pollutants which pose heightened risks to human or environmental health, such as highly toxic or bioaccumulative compounds.

*KM has not had any SNC violations for the parameters requested for reduction in monitoring frequency during the last two (2) years. KM is not requesting a monitoring reduction for perchlorate, which is considered the "critical" constituent in this remediation project, however, once the fluidized-bed reactor (FBR) stabilized monitoring results since have not exceeded the permit limitation.*

iii. Parameter-by-Parameter Performance History

At a minimum, the two most recent years of monthly average effluent data representative of current operating conditions for the parameter at the particular outfall will be used to calculate the long term average discharge rate for use in Table 1. The baseline monitoring frequencies in Table 1 of this guidance will normally be considered the level of monitoring in the existing effective NPDES permit. Permittees that receive monitoring frequency reductions are expected to take all appropriate measures to control both the average level of pollutants of concern in their discharge (mean) as well as the variability of such parameters in the discharge (variance).

**Table 1**  
**Ratio of Long Term Effluent Average**  
**to Monthly Average Limit**

Baseline				
Monitoring	75-66%	65-50%	49-25%	<25%
7/wk	5/wk	4/wk	3/wk	1/wk
6/wk	4/wk	3/wk	2/wk	1/wk
5/wk	4/wk	3/wk	2/wk	1/wk
4/wk	3/wk	2/wk	1/wk	1/wk
3/wk	3/wk	2/wk	1/wk	1/wk
2/wk	2/wk	1/wk	2/mo	1/mo
1/wk	1/wk	1/wk	2/mo	1/2mos
2/month	2/mo	2/mo	2/mo	1/quarter
1/month	1/mo	1/mo	1/quarter	1/6mos

Note: See above eligibility requirements.

New permittees should go through one permit cycle (5 years) before being eligible for consideration for reduced monitoring.

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*When NPDES permit NV0023060 was first issued in August 2000 parameters for monitoring were selected for information gathering either because they were associated with the perchlorate remediation process or because there was limited data available regarding the constituents' concentrations in the Las Vegas Wash. Data collection has been ongoing since permit issuance. Condition I.A.4. of the current permit anticipated that KM would request a reduction in the monitoring frequency and/or the constituent list as data was gathered (I.A.4.: Upon obtaining one year of data, the Permittee may request a reduction in monitoring frequency and analytical parameters. The request shall include a demonstration that the reduction is justified due to the consistent nature of the discharge and the ability of the discharge to meet the permit limits). Of the parameters which are controlled within and/or affected by the perchlorate remedial process, and for which KM is requesting a reduction in monitoring frequency, only TSS and iron have permit limits to apply guidance to. Both of these constituents have established average concentrations less than 10% of the respective permit limit. Other constituents in this category are monitor and report without any limits. All other constituents for which KM requested a reduction in frequency and/or analytical parameters were monitor and report without any limits, except manganese (effluent) which had a limit of 5 mg/L. The average manganese concentration in the effluent from April 2001 to February 2005 was 0.43 mg/L (<10% of permit limit).*

iv. Continued Eligibility for Reductions

Permittees are expected to maintain the performance levels that were used as the basis for granting monitoring reductions. To remain eligible for these reductions, the Permittee may not have any SNC violations for effluent limitations of the parameters for which reductions have been granted or failure to submit DMRs, or may not be subject to a new formal enforcement action. For facilities that do not maintain performance levels, the permitting authority may require increased monitoring in accordance with a Section 308 or 309 Order (or State equivalent).

v. Future Reductions for Ambient Monitoring

Based on the facility's agreement to participate in an ambient monitoring program, along with other stakeholders in a watershed, additional reductions could be provided, at the discretion of the permitting authority.

- (b) KM has requested that other sources of perchlorate-contaminated water be allowed to be treated in the FBR system. As other sources of perchlorate-contaminated water are identified, KM wishes to have the flexibility to address and treat (remediate) these waters. KM would be bound by the same limits as are in the permit, i.e., 1,000 gpm (1.45 MGD, 30-day average) and the discharge limits for perchlorate would remain at 18 µg/L.

KM currently holds NPDES Permit NV0023060 to discharge water treated through either an ion-exchange system or a biological treatment system to remove perchlorate from extracted groundwater. When the permit was issued on August 7, 2000, groundwater was treated using two ion exchange systems while a FBR biological treatment system was under design and construction. In November 2003 KM requested a major modification to permit NV0023060 to allow the use of the FBR for test period of nine (9) months to determine if an effluent limit of 18 µg/L could be reached and maintained. An increase in flow from 1.22 million gallons per day (MGD) (30-day average) to 1.45 MGD was also requested. These modifications were granted in NPDES Permit Number NV0023060 issued on March 4, 2004. Through monitoring results during the test period KM demonstrated that the FBR was capable of meeting the effluent limit for perchlorate of 18 µg/L.

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The test period demonstrated that the FBR performed within the discharge limitations established in the current permit. It is the intention of KM to operate the remediation project with the exclusive use of the FBR system. However, the ion-exchange system will remain on site as back-up to the FBR, in the event that the FBR malfunctions. The discharge limit of 3.0 mg/L perchlorate or 97% removal for the **ion exchange** system, whichever is greater, will remain as a condition of the permit.

**DISCHARGE CHARACTERISTICS:**

Perchlorate and hexavalent chromium ( $\text{Cr}^{6+}$ ) are the compounds subject to remedial action in this project. Ancillary compounds that may be found in process water are considered credited toward effluent limitations because their contribution to discharge characteristics is "solely as a result of their presence in intake water"<sup>2</sup> and these constituents, or some fraction thereof, would likely otherwise drain to the wash under inherent hydrologic dynamics. Regulation of ancillary compounds, with either discrete limits or as monitor and report requirements, remain unchanged in permit conditions.

Listed effluent discharge characteristics limit: 5-day biochemical oxygen demand, perchlorate, pH,  $\text{Cr}^{6+}$ , total chromium, total suspended solids, total iron, manganese, total phosphorus, and ammonia. Characteristics such as color, total inorganic nitrogen, unionized ammonia, TDS, sulfide, oil and grease, boron, dissolved oxygen, nitrate, kjeldahl nitrogen, chloride, radium isotopes, gross alpha, and chlorate are required to be monitored and reported. A demonstration that ancillary compound concentrations present in the intake are not increased as a function of treatment is required quarterly. Since the permit was first issued, discharge characteristics have generally complied with required limitations. As previously stated KM proposes to reduce monitoring frequency or eliminate from monitoring specific parameters (See Tables I.1.A., I.A.B. and I.2 and Attachment B).

The design of the FBR biological treatment system uses a two-phase series of reactors that contain sand and granular activated carbon as biological attachment media. Two sets of sand FBRs operate as primary treatment reactors while two sets of carbon FBRs provide secondary polish. Post polish process flow is aerated, clarified, and disinfected prior to discharge into the Las Vegas Wash west (upstream) of Telephone Line and Pabco Roads. Influent water is also treated with ferrous sulfate to reduce, precipitate, and remove  $\text{Cr}^{6+}$  before introduction into the FBR system.

**RECEIVING WATER CHARACTERISTICS:**

The receiving water for Outfall 001 is the Upper Las Vegas Wash defined as the wash from Telephone Line Road upstream to the confluence of discharges from City of Las Vegas and Clark County wastewater treatment plants. Water quality standards for the toxic constituents applicable to the Las Vegas Wash are contained in Nevada Administrative Codes (NAC) 445A.144. Specific maintenance limits for this section of the Las Vegas Wash are contained in 445A.199. Constituents included in NAC 445A.199 are temperature, pH, dissolve oxygen, Nitrogen as N, TSS, TDS and fecal coliform. Existing effluent limitations consider and protect these water quality criteria.

**PROPOSED LIMITATIONS:**

Effluent samples taken in compliance with the monitoring requirements specified below shall be taken after treatment and prior to confluence with the receiving waters. Effluent samples are designated as **EFF**. Influent samples shall be collected at the intake of the treatment, designated as **INF**. LW6.05, LW0.55, LW5.5 (formerly LVW-2, LVW-5, and LM-6) are located at designated sampling locations in the Las Vegas Wash. LW6.05 is located 6.05 miles upstream of the confluence of the Las Vegas Wash with Lake Mead. LW 5.5 is located 5.5 miles upstream of the confluence of the Las Vegas Wash with Lake Mead. LW 0.55 is located 0.55 mile upstream of the confluence of the Las Vegas Wash with Lake Mead (AKA, North Shore Road).

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<sup>2</sup> 40 CFR Part 122.45(g) and 40 CFR 122.21(h)(4)(iv)

<sup>3</sup> NAC 445A.263, 40 CFR Part 122.62.

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The discharge shall be limited and monitored by the Permittee as specified below\*:

TABLE I.1A.

<u>PARAMETERS</u>	<u>EFFLUENT DISCHARGE LIMITATIONS</u>			<u>MONITORING REQUIREMENTS</u>		
	<b>30-Day Average</b>	<b>Daily Maximum</b>	<b>30 Day Average (lb/day)</b>	<b>Sample Location(s)</b>	<b>Measurement Frequency</b>	<b>Sample Type</b>
<b>Permitted Flow</b>	<b>1.45 MGD</b>	<b>1.75 MGD</b>		EFF	Continuous	Flow meter

TABLE I.1.B.

<u>PARAMETERS</u>	<u>EFFLUENT DISCHARGE LIMITATIONS</u>			<u>MONITORING REQUIREMENTS</u>		
	<b>30 Day Ave.</b>	<b>7 Day Ave.</b>	<b>30 Day Ave. lb/day</b>	<b>Sample Location(s)</b>	<b>Measurement Frequency</b>	<b>Sample Type</b>
BOD <sub>5</sub> (inhibited)	Monitor & Report	Monitor & Report (mg/L)	Monitor & Report	INF	Weekly	Discrete
	25 mg/L	40 mg/L	254	EFF		
Perchlorate-Ion Exchange		Monitor & Report	Monitor & Report	INF	Weekly	Daily discrete samples, composited weekly
	97%* removal or 3 mg/l whichever is greater			EFF		
Perchlorate–Fluidized Bed Biological Reactor	Monitor & Report	Monitor & Report	Monitor & Report	INF	Weekly	Daily discrete samples, composited weekly
	18 µg/L	Monitor & Report	0.22	EFF		
pH	between 6.5 and 9.0 standard units			EFF	<del>Weekly</del> <b>Monthly</b>	Discrete
Hexavalent Chromium	Monitor & Report (mg/L)	Monitor & Report (mg/L)	Monitor & Report	INF	Weekly	Discrete
	Monitor & Report (mg/L)	0.01 mg/l 0.12 lb/day	Monitor & Report	EFF		
Total Chromium	Monitor & Report (mg/L)	Monitor & Report (mg/L)	Monitor & Report	INF	Weekly	Discrete
	Monitor & Report (mg/L)	0.1 mg/l 1.21 lb/day	Monitor & Report	EFF		
Total Suspended Solids	135 mg/L	Monitor & Report (mg/L)	Monitor & Report 1,634	EFF	<del>Weekly</del> <b>Monthly</b>	Discrete

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<b>PARAMETERS</b>	<b>EFFLUENT DISCHARGE LIMITATIONS</b>			<b>MONITORING REQUIREMENTS</b>		
	<b>30 Day Ave.</b>	<b>7 Day Ave.</b>	<b>30 Day Ave. lb/day</b>	<b>Sample Location(s)</b>	<b>Measurement Frequency</b>	<b>Sample Type</b>
Iron, Total	10 mg/L	Monitor & Report (mg/L)	Monitor & Report 121.03	EFF	<del>Weekly</del> <b>Monthly</b>	Discrete
Manganese	5 mg/L	NA	Monitor and Report 60.52	EFF	<del>Weekly</del> <b>Quarterly</b>	Discrete
Total Phosphorus as P	Monitor & Report (mg/L)	Monitor & Report (mg/L)	Monitor & Report	INF	Weekly	Discrete
	Monitor & Report (mg/L)	Monitor & Report (mg/L)	20**	EFF		
	**If the load of Total Phosphorous in the Las Vegas Wash exceeds 434 lb/day March 1 - October 31st, the Permittee shall negotiate an Individual Waste Load Allocation or another approved mechanism which ensures the WQS will be met.			LW0.55	Twice/month	Discrete
Total Ammonia as N	Monitor & Report (mg/L)	Monitor & Report (mg/L)	40**	EFF	Weekly	Discrete
	**If the load of Total Ammonia in the Las Vegas Wash exceeds 970 lb/day April 1- September 30, the Permittee shall negotiate an Individual Waste Load Allocation or another approved mechanism which ensures the WQS will be met.			LW0.55	Twice/month	Discrete
Attachment A	The permittee shall demonstrate that there is no increase in the concentration or loading of the "other" constituents as a result of the discharge. The permittee shall only be responsible for utilizing results which are greater than the PQL, however, all data above the MDL shall be reported.			EFF	<del>Quarterly</del> <b>Annually</b>	Discrete
Color	Monitor & Report (color units)			INF, EFF	<del>Weekly</del> <b>Monthly</b>	Discrete
Total Inorganic Nitrogen as N	(mg/L)	Monitor & Report	(lb/day)	INF, EFF	<del>Weekly</del> <b>Monthly</b>	Discrete
Sulfate	(mg/L)	Monitor & Report	(lb/day)	INF, EFF	<del>Weekly</del> <b>Monthly</b>	Calculated
Total Dissolved Solids	(mg/L)	Monitor & Report	(lb/day)	INF, EFF	<del>Weekly</del> <b>Quarterly</b>	Discrete
Sulfide	(mg/L)	Monitor & Report	(lb/day)	INF, EFF	<del>Weekly</del> <b>Monthly</b>	Discrete
Oil and Grease	(mg/L)	Monitor & Report	(lb/day)	INF, EFF	<del>Weekly</del>	Discrete

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PARAMETERS	EFFLUENT DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS		
	30 Day Ave.	7 Day Ave.	30 Day Ave. lb/day	Sample Location(s)	Measurement Frequency	Sample Type
					<del>Weekly</del> <b>Quarterly</b>	
Boron	(mg/L)	Monitor & Report	(lb/day)	EFF	<del>Weekly</del> <b>Quarterly</b>	Discrete
Dissolved Oxygen	(mg/L)	Monitor & Report	(lb/day)	EFF	Weekly	Discrete
Nitrate as N	(mg/L)	Monitor & Report	(lb/day)	EFF	<del>Weekly</del> <b>Monthly</b>	Discrete
Kjeldahl Nitrogen as N	(mg/L)	Monitor & Report	(lb/day)	INF, EFF	<del>Weekly</del> <b>Monthly</b>	Discrete
Chloride	(mg/L)	Monitor & Report	(lb/day)	INF, EFF	<del>Weekly</del> <b>Quarterly</b>	Discrete
<del>Radium 226 + 228</del>		<del>Monitor &amp; Report</del>		<del>EFF</del>	<del>Weekly</del>	<del>Discrete</del>
<del>Gross Alpha</del>		<del>Monitor &amp; Report</del>		<del>EFF</del>	<del>Weekly</del>	<del>Discrete</del>
Chlorate (ClO <sub>3</sub> )	(mg/L)	Monitor & Report	(lb/day)	INF, EFF	<del>Weekly</del> <b>Monthly</b>	Discrete
Acute WET	See permit condition I.A.14.			EFF	Monthly	Discrete

\*: Proposed modifications to monitoring frequencies: ~~Double strikethrough~~ indicates language to be deleted; ***Italicized Bolded*** lettering indicates language to be added to new (renewed) permit

MGD: Million gallons per day  
as N: As nitrogen  
as P: As phosphorus  
lb/day: Pounds per day

PQL: Practical Quantification Limit  
WET: Whole Effluent Toxicity  
MDL: Method Detection Limit

WQS: Water Quality Standards  
mg/L: Milligrams per liter  
µg/L: Micrograms per liter

Table I.2\*

PARAMETERS	DOWNSTREAM ACTION THRESHOLDS apply at LW5.5		MONITORING REQUIREMENTS		
	30 day average	Daily Max	Sample Locations	Measurement Frequency	Sample type***
Total Dissolved Solids	2400 mg/L	Monitor & Report (mg/L)	Upstream, LW6.05, LW5.5	<del>Twice/month</del> <b>Quarterly</b>	Discrete
			UPMW	Quarterly	
Total Inorganic Nitrogen	17 mg/l	Monitor & Report (mg/L)	Upstream, LW6.05, LW5.5	<del>Twice/month</del> <b>Quarterly</b>	Discrete
			UPMW	Quarterly	
Color	Monitor & Report (color units)		Upstream, LW6.05, LW5.5	<del>Twice/month</del> <b>Quarterly</b>	Discrete
<del>Radium 226 + 228</del>	<del>Monitor &amp; Report</del>		<del>Upstream, LW6.05, LW5.5</del>	<del>Twice/month</del>	<del>Discrete</del>
<del>Gross Alpha</del>	<del>Monitor &amp; Report</del>		<del>Upstream, LW6.05, LW5.5</del>	<del>Twice/month</del>	<del>Discrete</del>
Iron, Total	Monitor & Report mg/L		Upstream, LW6.05, LW5.5	<del>Twice/month</del> <b>Quarterly</b>	Discrete
			UPMW	Quarterly	
Manganese	Monitor & Report mg/L		Upstream, LW6.05, LW5.5	<del>Twice/month</del> <b>Quarterly</b>	Discrete



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PARAMETERS	DOWNSTREAM ACTION THRESHOLDS apply at LW5.5		MONITORING REQUIREMENTS		
	30 day average	Daily Max	Sample Locations	Measurement Frequency	Sample type***
			UPMW	Quarterly	Discrete
<del>Molybdenum</del>	<del>Monitor &amp; Report</del>		<del>Upstream, LW6.05, LW5.5</del>	<del>Twice/month</del>	<del>Discrete</del>
			UPMW	Quarterly	
<del>Copper</del>	<del>Monitor &amp; Report</del>		<del>Upstream, LW6.05, LW5.5</del>	<del>Twice/month</del>	<del>Discrete</del>
			UPMW	Quarterly	
<b>Chromium (total)</b>	Monitor & Report mg/L		Upstream, LW6.05, LW5.5	<del>Twice/month</del> <b>Quarterly</b>	Discrete
			UPMW	Quarterly	
<b>Boron</b>	Monitor & Report mg/L		Upstream, LW6.05, LW5.5	<del>Twice/month</del> <b>Quarterly</b>	Discrete
			UPMW	Quarterly	
<del>Fluoride</del>	<del>Monitor &amp; Report</del>		<del>Upstream, LW6.05, LW5.5</del>	<del>Twice/month</del>	<del>Discrete</del>
			UPMW	Quarterly	
<b>Chloride</b>	Monitor & Report mg/L		Upstream, LW6.05, LW5.5	<del>Twice/month</del> <b>Quarterly</b>	Discrete
			UPMW	Quarterly	
<b>Attachment A</b>	Monitor & Report		Upstream, LW6.05, LW5.5	Annually	Discrete

\*: Proposed modifications to monitoring frequencies: ~~Double strikethrough~~ indicates language to be deleted; ***Italicized Bolded*** lettering indicates language to be added to new (renewed) permit

\*\*\* The Permittee may composite LV Wash samples upon receiving Division approval of a sampling plan.

Upstream: 150 feet upstream of the discharge flow into the wash

#### Conditions:

1. Laboratory methods acceptable to illustrate compliance with the designated effluent limitations shall be either: (1) approved per 40 Code of Federal Regulations (CFR) Part 136, (2) an equivalent method approved by the Nevada Division of Environmental Protection. EPA Method 314.0 shall be used to determine compliance with effluent limitations until otherwise specified by the Nevada Division of Environmental Protection.
2. The Permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities, collection systems or pump stations installed or used by the Permittee in association with, or relative to, this permit or to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes optimum performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures.

#### Rationale:

##### Flow:

This parameter limitation authorizes operation of the FBR system to yield maximum remedial effect and optimal return on investment. The 1.45 MGD permitted flow rate as a 30-day average represents the daily volume of 1000 gpm rounded up, and 1.75 MGD as the daily maximum represents an additional 20% margin for operating fluctuation.



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The perchlorate limitation is below EPA's recently established reference dose (RfD) of 0.0007 mg/kg/day. This RfD translates to a Drinking Water Equivalent Level (DWEL) of 24.5 ppb ( $\mu\text{g/L}$ ) (EPA Press Release dated February 18, 2005). The effluent discharge limitation equates to a maximum perchlorate mass discharge of 0.22 ( $18 \mu\text{g/L}$ , 1.45 MGD) pound per day 30-day average and 0.26 pound per day as a daily maximum.

***Reduction in Monitoring Frequency:***

When NPDES permit NV0023060 was first issued in August 2000 parameters for monitoring were selected for information gathering either because they were associated with the perchlorate remediation process or because there was limited data available regarding the constituent concentrations in the Las Vegas Wash. Data collection has been ongoing since permit issuance. Condition I.A.4. of the current permit anticipated that KM would request a reduction in the monitoring frequency and/or the constituent list as data was gathered (I.A.4.: Upon obtaining one year of data, the Permittee may request a reduction in monitoring frequency and analytical parameters. The request shall include a demonstration that the reduction is justified due to the consistent nature of the discharge and the ability of the discharge to meet the permit limits). Of the parameters which are controlled within and/or affected by the perchlorate remedial process, and for which KM is requesting a reduction in monitoring frequency, only TSS and iron have permit limits to apply guidance to\*. Both of these constituents have established average concentrations less than 10% of the respective permit limit. Other constituents in this category are monitor and report without any limits. All other constituents for which KM requested a reduction in frequency and/or analytical parameters were monitor and report without any limits, except manganese (effluent) which had a limit of 5 mg/L. The average manganese concentration in the effluent from April 2001 to February 2005 was 0.5 mg/L (10% of permit limit). The proposed reduction in monitoring frequencies are shown in **Tables I.1.A., I.1.B. and I.2.**

\* EPA Interim Guidance applies to parameters which have specific effluent limits.

**SCHEDULE OF COMPLIANCE:**

The Permittee shall implement and comply with the provisions of the permit upon issuance, and the following schedule of compliance, after approval by the Administrator, including in said implementation and compliance, any additions or modifications the Administrator may make in approving the schedule of compliance.

- **Upon issuance of the permit**, the Permittee shall achieve compliance with discharge limitations as described under Table I.1 and in observance of prescribed schedules of compliance.
- **Within 45 days of the issuance of this permit**, the Permittee shall submit an updated Operations & Maintenance (O&M) Manual for approval by the Division.
- **Total Dissolved Solids (TDS)** NAC 445A.143 Nothing in this permit condition shall alleviate the responsibility of other parties under consent agreement to the Bureau of Corrective Action for the groundwater issues at the BMI complex. Any work pertaining to TDS must recognize that the water quality standard for TDS (NAC 445A.199) must be maintained. Prior to treating and discharging groundwater other than groundwater from the chromium treatment system, the Permittee shall submit the following information and obtain approval from the Division:
  - i. The Permittee shall continue to participate in regional solutions to the TDS issues in the Las Vegas Wash. The Permittee shall submit a quarterly report in accordance with I.B.1. which includes any progress made on reducing the TDS loading to the Wash either in directly reducing the loading to the Wash from the discharge or regional projects the Permittee has participated in which reduce the loading offsite in the same watershed.
- The Permittee shall fully cooperate in good faith with any persons required by the Division to treat the discharge subsequent to treatment by the Permittee.

**PROPOSED DETERMINATION:**

The Division has made the determination to renew and modify the permit as proposed, under the provisions

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prescribed, for a period of five (5) years. In accordance with Nevada Administrative Code 445A.232, this discharge is classified as a *Discharge from Remediation, Dewatering, other than a discharge to ground water from the dewatering of a mine, or from a Power Plant, A Manufacturing or Food Processing Facility or Any Other Commercial or Industrial Facility – 1,000,000 gallons or more but less than 2,000,000 gallons of process water daily.*

**PROCEDURES FOR PUBLIC COMMENT:**

Notice of the Division's intent to issue a permit authorizing the facility to discharge to surface water of the State of Nevada, subject to the conditions contained within the permit, is being sent to the **Las Vegas Review Journal** for publication. Notice is also mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice, and must be postmarked, faxed, or e-mailed by 5:00 p.m. on **August 1, 2005**. The comment period can be extended at the discretion of the Administrator. A public hearing on the proposed determination can be requested by the Applicant, any affected state, any affected interstate agency, the Regional Administrator, or any interested agency, person, or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reason(s) why a hearing is warranted.

Any public hearing held by the Administrator will be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings will be conducted in accordance with NAC 445A.238. The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Prepared by: James T. Hogan  
Staff Engineer II  
June 10, 2005